Getting Started in Research





Overview

- Why do research?
- Overview of research opportunities
 - with a focus on-campus or very local, academic year opportunities
- How to find faculty advisors
 - identifying them, tips for reaching out to them





What is research?

- Asking a question nobody's asked before
- Putting in the work to answer it
- Communicating what you found





Is research right for me?

- What do you hope to gain?
- Are you excited about diving into the unknown?
- Can you work during the academic year and/or summer?
- Do you want academic credit for your research?
- Can you commit 10-15 hours a week?
- Are you hoping a research opportunity will help you decide on whether you want to pursue graduate school?



Paths to Research Involvement

1. Undergraduate Research for Academic Credit

- Biology credit: BILD 99, BISP 193, BISP 196, BISP 197, BISP 199
- Your PI need not be in biology, but the project must be biology-focused
- Application deadlines for each term listed on the Biology website
- You must find a PI in order to apply

Non-Biology credit through other departments/divisions

• AIP 197, MED 199, SIO 199, etc.

Note: Students can expect to put in 12+ hours/week for 4-unit special studies courses

- Ask faculty about time expectations!
 - Available if your projects does not meet BISP eligibility requirements



Paths to Research Involvement

- 2. Paid positions on <u>Handshake</u>
- 3. Volunteer
- 4. Undergraduate research scholarships (URS)
 - Check <u>UCSD Academic Enrichment Programs (AEP)</u> for the most up-todate information
 - Many of the scholarships are for summer research
 - Most applications due during Winter Quarter

Note: Many students pursue a combination of these paths

- Ask faculty about time expectations!
- Available if your projects does not meet BISP eligibility requirements





How do I find a faculty mentor?

1. <u>REAL Portal</u>

- 2. <u>Academic Internship Program (AIP)</u> application site
- 3. Search faculty profiles on divisional/departmental websites
 - Example:
 Division > Faculty & Research > Faculty > Names > look for lab website
 - <u>Biology faculty directory</u>, <u>Salk faculty</u>, J. Craig Venter Institute (JCVI – 199 academic credit not available for off-campus labs)
- 4. Faculty who you have taken a class with or are interested in learning from
- 5. Contact faculty directly via email

Note: Not all faculty post opportunities on the REAL Portal, so it is best to always ask about openings **after** researching their lab website, publications, etc. \underline{UC}



Email Tips: What do I say?

- Tell them why you are writing
 - To ask about research opportunities
- Customize your message
 - Why is this person's research interesting to you?
 - Faculty care more about genuine interest/passion than experience
- Briefly point out any relevant experience
 - Bio lab classes, prior lab work, etc.
- Proofread your emails
- Keep it brief! Include the most important stuff first
 - Follow-up with an email 1-2 weeks after your initial email
 - Keep trying!
 - It can take several weeks, even months, to find an opportunity



I got an interview! Now what?

- Go in with knowledge of their research from website, or better yet, a **recent** research paper or two
- Bring a list of questions
 - About the science based on your readings
 - About the types of projects available
- Explain how this experience is important to your careers
- Show interest by taking notes, asking if they can suggest readings to learn more about their topic
- Send a thank you message afterwards that conveys your enthusiasm
- BIO SCI
- Follow-up with an email 1-2 weeks after your initial email



I got an offer! Now what?

- Make sure you understand the expectations
 - Overall hours per week
 - Specific times you should be there
 - If you're unsure before you accept the offer, ask!
- Meet those expectations
- After you start, ask more questions! It's much better to admit that you don't know something and ask for clarification than to keep going and make a mistake as a result





What is research? Why is research valuable for me? Is research right for me?

More information: biology.ucsd.edu/education/undergrad/research



